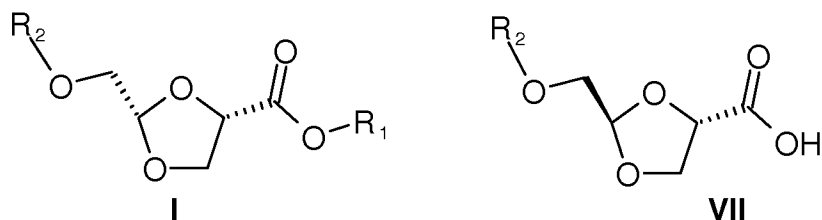


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended): A process for producing a compound of formula I and a compound of formula VII:



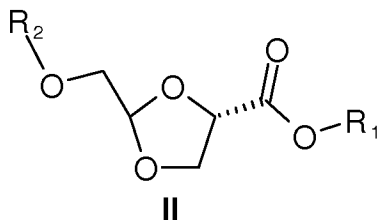
wherein

R₁ is C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₆₋₁₂ aryl, C₃₋₁₀ heterocycle, C₆₋₁₂ aralkyl or C₃₋₁₀ heteroaralkyl, and

R₂ is CO-C₁₋₆ alkyl, CO-C₆₋₁₂ aryl, CO-C₁₋₆ alkoxy, CO-C₆₋₁₂ aryloxy, or CO-C₆₋₁₂ arylalkyl;

said process comprising:

a) subjecting a compound of formula II:

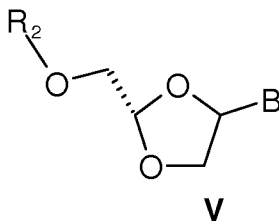


to an enzymatic diastereomeric resolution in the presence of a suitable amount of Pig Liver Esterase enzyme or Porcine Pancreatic Lipase enzyme, wherein said resolution is conducted in the presence of a solvent selected from water, C₁₋₁₂ alkanol, toluene, acetonitrile, tetrahydrofuran, dimethylformamide, dimethylsulfonamide, N-methylpyrrolidone, isooctane, t-butylmethyl ether,

SHIRE-0518

and mixtures thereof; and

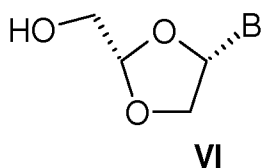
- b) recovering a compound of formula I and a compound of formula VII.
2. (Original): The process according to claim 1, wherein R_1 is C_{1-12} alkyl.
3. (Previously Presented): The process according to claim 1 wherein R_2 is $CO-C_{1-6}$ alkyl.
4. (Previously Presented): The process according to claim 1, wherein R_2 is $CO-C_{6-12}$ aryl.
5. (Previously Presented): The process according to claim 1, wherein the enzyme is Pig Liver Esterase.
6. (Previously Presented): The process according to claim 1, wherein the enzyme is Porcine Pancreatic Lipase.
7. (Previously Presented): The process according to claim 1, further comprising:
- a) replacing the functional group at position C4 of the compound of formula I to produce a compound of formula V:



wherein B is purine or pyrimidine base or an analogue thereof;

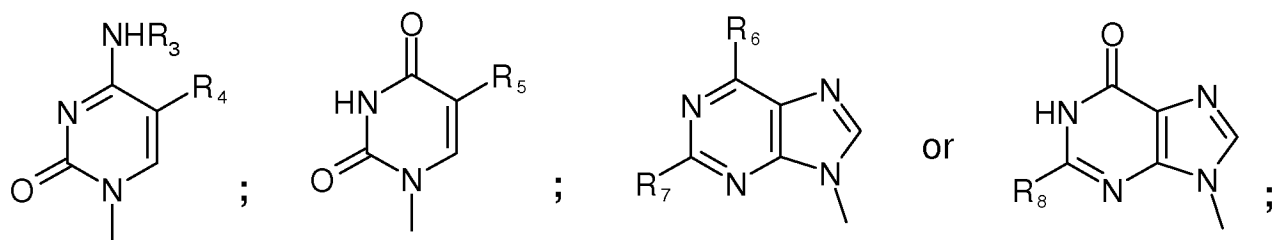
- b) removing the group R_2 of said compound of formula V; and

c) recovering a compound of formula VI:



or a pharmaceutically acceptable salt thereof.

8. (Previously Presented): The process according to claim 7, wherein B is:



R_3 is H, C_{1-6} alkyl, C_{1-6} acyl, or CO-R_9 ;

R_9 is H or C_{1-6} alkyl;

R_4 and R_5 are each independently H, C_{1-6} alkyl, bromide, chloride, fluoride, iodide or CF_3 ; and

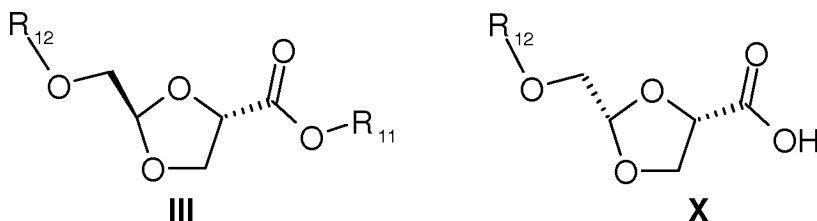
R_6 , R_7 and R_8 are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl, or C_{3-6} cycloalkylamino.

9. (Cancelled):

10. (Original): A process according to claim 1, wherein R_1 is C_{1-12} alkyl and R_2 is CO-C_{6-12} aryl.

11. (Original): A process according to claim 1, wherein R_1 is methyl and R_2 is benzoyl.

12. (Currently Amended): A process for producing a compound of formula III and a compound of formula X:



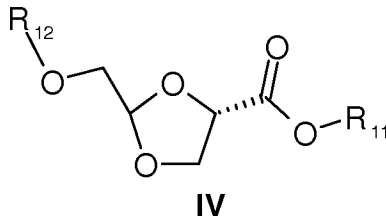
wherein

R₁₁ is C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₆₋₁₂ aryl, C₃₋₁₀ heterocycle, C₆₋₁₂ aralkyl or C₃₋₁₀ heteroaralkyl; and

R₁₂ is CO-C₁₋₆ alkyl, CO-C₆₋₁₂ aryl, CO-C₁₋₆ alkoxy, CO-C₆₋₁₂ aryloxy, or CO-C₆₋₁₂ arylalkyl,

said process comprising:

a) subjecting a compound of formula IV:



to an enzymatic diastereomeric resolution in the presence of a suitable amount of an enzyme, wherein said enzyme is Candida Antarctica "A" lipase, Candida Antarctica "B" lipase, Candida Lypolitica Lipase, or Rhizomucor Miehei Lipase, wherein said resolution is conducted in the presence of a solvent selected from water, C₁₋₁₂ alkanol, toluene, acetonitrile, tetrahydrofuran, dimethylformamide, dimethylsulfonamide, N-methylpyrrolidone, isooctane, t-butylmethyl ether, and mixtures thereof; and

b) recovering a compound of formula III and a compound of formula X.

13. (Original): The process according to claim 12, wherein R₁₁ is C₁₋₁₂ alkyl.

SHIRE-0518

14. (Previously Presented): The process according to claim 12, wherein R_{12} is CO-C_{1-6} alkyl.

15. (Original): The process according to claim 12, wherein R_{12} is CO-C_{6-12} aryl.

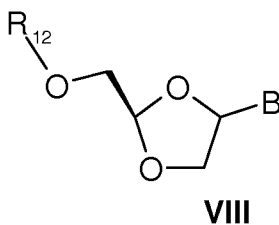
16. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "A" lipase.

17. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "B" lipase.

18. (Original): The process according to claim 12, wherein the enzyme is Candida Lypolitica Lipase.

19. (Original): The process according to claim 12, wherein the enzyme is Rhizomucor Miehei Lipase.

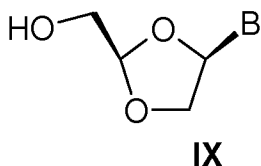
20. (Previously Presented): The process according to claim 12, further comprising:
a) replacing the functional group at position C4 of the compound of formula III to produce a compound of formula VIII:



wherein B is purine or pyrimidine base or an analogue thereof;

b) removing group R_{12} of said compound of formula VIII;

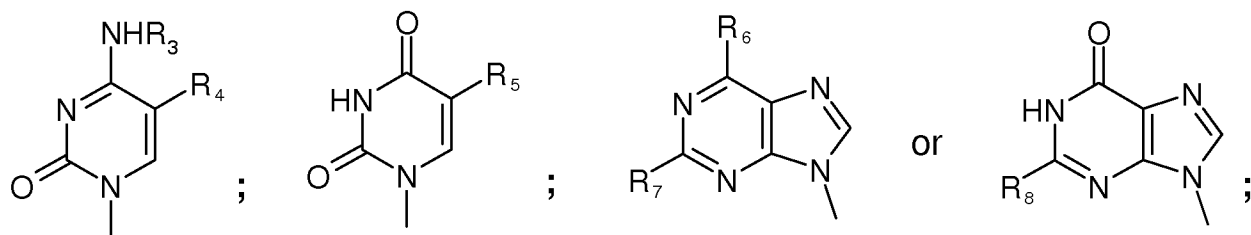
c) recovering a compound of formula IX:



or a pharmaceutically acceptable salt thereof.

21. (Previously Presented): The process according to claim 20, wherein

B is



R₃ is H, C₁₋₆ alkyl, C₁₋₆ acyl and CO-R₉;

R₉ is H or C₁₋₆ alkyl;

R₄ and R₅ are each independently H, C₁₋₆ alkyl, bromide, chloride, fluoride, iodide or CF₃; and

R₆, R₇ and R₈ are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl or C₃₋₆ cycloalkylamino.

22. (Cancelled):

23. (Original): A process according to claim 12, wherein R₁₁ is C₁₋₁₂ alkyl and R₁₂ is CO-C₆₋₁₂ aryl.

24. (Original): A process according to claim 12, wherein R₁₁ is methyl and R₁₂ is benzoyl.

25. (Currently Amended): A process according to claim 1, wherein said process is

SHIRE-0518

carried out at a pH of 6 to 8, at a temperature in the range of 5 to 50°C, ~~and in the presence of a solvent~~, and the concentration of enzyme with respect to the solvent is 1 mg/ml to 100 mg/ml.

26. (Currently Amended): A process according to claim 12 4, wherein said process is carried out at a pH of 6 to 8, at a temperature in the range of 5 to 50°C, ~~and in the presence of a solvent~~, and the concentration of enzyme with respect to the solvent is 1 mg/ml to 100 mg/ml.

27. (Previously Presented): A process according to claim 1, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula II is 1% to 25%.

28. (Previously Presented): A process according to claim 1, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula II is 5% to 10%.

29. (Previously Presented): A process according to claim 12, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula IV is 1% to 25%.

30. (Previously Presented): A process according to claim 12, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula IV is 5% to 10%.